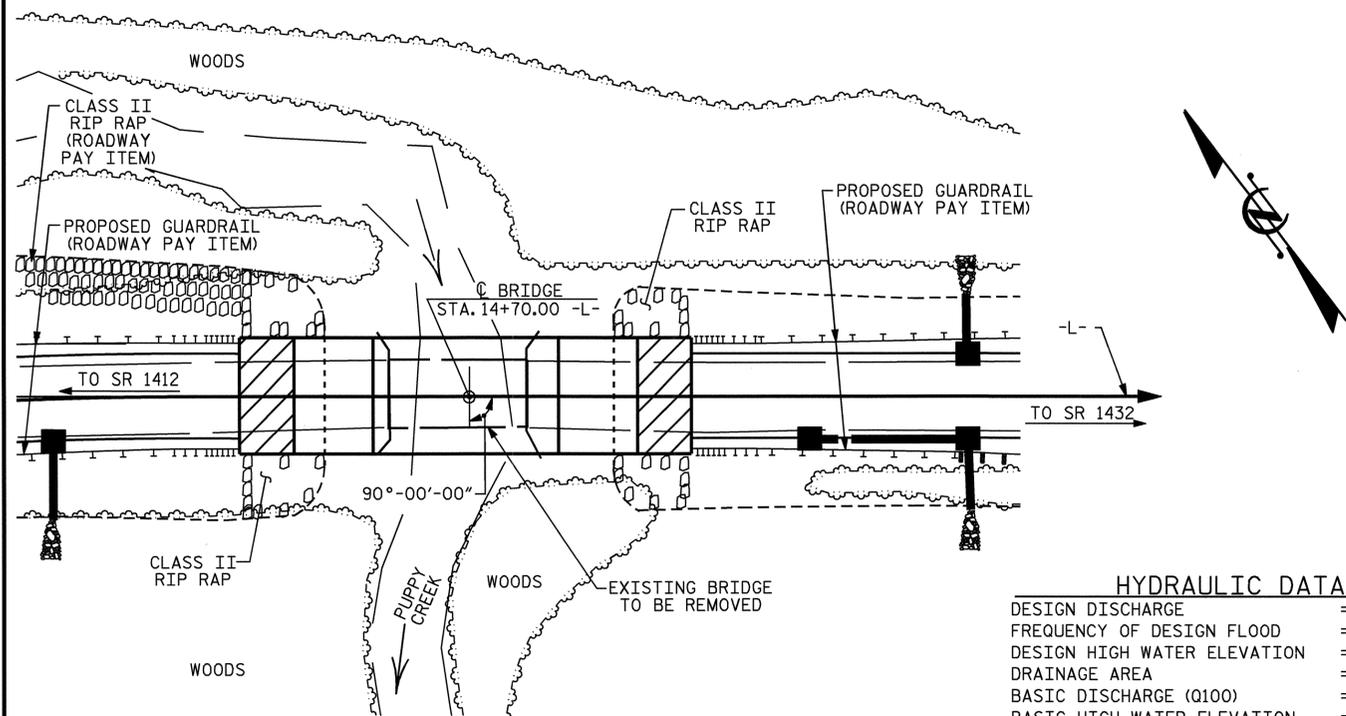


BM# 1 -L- STA. 14+92.59, 105.36' LT, ELEV. 140.26'



FOR UTILITY INFORMATION, SEE UTILITY PLANS AND SPECIAL PROVISIONS.

HYDRAULIC DATA

DESIGN DISCHARGE	= 2760 cfs
FREQUENCY OF DESIGN FLOOD	= 50 yrs.
DESIGN HIGH WATER ELEVATION	= 145.69
DRAINAGE AREA	= 28.4 sq. mi.
BASIC DISCHARGE (Q100)	= 3480 cfs
BASIC HIGH WATER ELEVATION	= 147.14

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	= 3480 cfs
FREQUENCY OF OVERTOPPING FLOOD	= 50 yrs. +
OVERTOPPING FLOOD ELEVATION	= 146.25

LOCATION SKETCH

THIS BRIDGE SHALL BE CONSTRUCTED USING TOP-DOWN CONSTRUCTION METHODS. THE USE OF A TEMPORARY CAUSEWAY OR WORK BRIDGE IS NOT PERMITTED.
 NO CRANE OR OTHER EQUIPMENT WHICH APPLIES A LOADING GREATER THAN HS20 SHALL BE PLACED ON SPAN B.

NOTES

ASSUMED LIVE LOAD = HS 20 OR ALTERNATE LOADING, EXCEPT THAT CORED SLAB UNITS IN SPANS A & C HAVE BEEN DESIGNED FOR HS25.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.

FOR EROSION CONTROL MEASURES SEE EROSION CONTROL PLANS.

THIS BRIDGE HAS BEEN DESIGNED BY THE STRENGTH DESIGN METHOD AS SPECIFIED IN AASHTO STANDARD SPECIFICATIONS.

THE EXISTING STRUCTURE CONSISTING OF TIMBER DECK ON STEEL GIRDER/FLOOR BEAM SYSTEM ON TIMBER CAP & PILES, WITH SPANS OF 1 @ 19'-9" & 1 @ 20'-9" WITH A CLEAR ROADWAY WIDTH OF 19.2 FT. SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED BELOW THE LEGAL LOAD LIMIT.

THE SUBSTRUCTURE OF EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE. SINCE THIS INFORMATION IS SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR, THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THE EXISTING BRIDGE SUBSTRUCTURE SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL INTO THE WATER. THE CONTRACTOR SHALL REMOVE THE BRIDGE AND SUBMIT PLANS FOR DEMOLITION IN ACCORDANCE ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.

INASMUCH AS THE PAINT SYSTEM ON THE EXISTING STRUCTURAL STEEL CONTAINS LEAD, THE CONTRACTOR'S ATTENTION IS DIRECTED TO ARTICLE 107-1 OF THE STANDARD SPECIFICATIONS. ANY COSTS RESULTING FROM COMPLIANCE WITH APPLICABLE STATE OR FEDERAL REGULATIONS PERTAINING TO HANDLING OF MATERIALS CONTAINING LEAD BASED PAINT SHALL BE INCLUDED IN THE BID PRICE FOR REMOVAL OF EXISTING STRUCTURE AT STATION 17+70.00 -L-."

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR SEISMIC DESIGN OF HIGHWAY BRIDGES FOR SEISMIC PERFORMANCE CATEGORY A.

THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH BAR USED. THE BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLES, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS.

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH HEC 18, "EVALUATING SCOUR AT BRIDGES", NOVEMBER, 1995.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 25 FT. EACH SIDE OF CENTERLINE ROADWAY AS DIRECTED BY THE ENGINEER. THE ESTIMATED QUANTITY IS LESS THAN 500 CUBIC YARDS. THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR UNCLASSIFIED STRUCTURE EXCAVATION. FOR UNCLASSIFIED STRUCTURE EXCAVATION, SEE SPECIAL PROVISIONS.

DRIVE PILES AT BENT #1 TO AN ELEVATION NO HIGHER THAN 111.3 FT. AND A MINIMUM BEARING CAPACITY OF 70 TONS.

DRIVE PILES AT BENT #2 TO AN ELEVATION NO HIGHER THAN 114 FT. AND A MINIMUM BEARING CAPACITY OF 70 TONS.

TESTING THE FIRST PRODUCTION PILE WITH THE PILE DRIVING ANALYZER (PDA) DURING DRIVING OR REDRIVING IS REQUIRED AT BENT #1 AND BENT #2. SEE PILE DRIVING ANALYZER SPECIAL PROVISION.

THE SCOUR CRITICAL ELEVATION FOR BENT #1 AND BENT #2 IS 125 FT. THE SCOUR CRITICAL ELEVATIONS ARE FOR USE BY MAINTENANCE FORCES TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

DRIVE PILES AT END BENT #1 AND END BENT #2 TO A MINIMUM BEARING CAPACITY OF 50 TONS.

TESTING THE FIRST PRODUCTION PILE WITH THE PILE DRIVING ANALYZER (PDA) DURING DRIVING OR REDRIVING IS REQUIRED AT END BENTS #1 OR #2. SEE PILE DRIVING ANALYZER SPECIAL PROVISION.

WHEN DRIVING PILES, DO NOT EXCEED THE MAXIMUM BLOW COUNT.

FOR STEEL H PILES, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

ASPHALT WEARING SURFACE IS INCLUDED IN ROADWAY QUANTITY ON ROADWAY PLANS.

FOR CONSTRUCTION OF SUBSTRUCTURE, SEE SPECIAL PROVISIONS.

FOR CONSTRUCTION OF SUPERSTRUCTURE, SEE SPECIAL PROVISIONS.

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE	UNCLASSIFIED STRUCTURE EXCAVATION	BRIDGE APPROACH SLABS	HP 12 x 53 STEEL PILES		PP 18 X 0.50 STEEL PILES		PLAIN RIP RAP CLASS II (2'-0" THICK)	CONSTRUCTION OF SUBSTRUCTURE	CONSTRUCTION OF SUPERSTRUCTURE	PDA TESTING	PDA ASSISTANCE
	LUMP SUM	LUMP SUM	LUMP SUM	NO.	LIN. FT.	NO.	LIN. FT.	TON	LUMP SUM	LUMP SUM	EACH	EACH
END BENT #1		LUMP SUM		5	260.0			245			1	1
BENT #1						7	476.0				1	1
BENT #2						7	448.0				1	1
END BENT #2		LUMP SUM		5	245.0			206				
TOTAL	LUMP SUM	LUMP SUM	LUMP SUM	10	505.0	14	924.0	451	LUMP SUM	LUMP SUM	3	3

PROJECT NO. B-4152
HOKE COUNTY
 STATION: 14+70.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 Raleigh
GENERAL DRAWING
FOR BRIDGE OVER
PUPPY CREEK ON
SR 1422 BETWEEN
SR 1412 AND SR 1432



DRAWN BY : J. G. KHARVA DATE : 03-17-05
 CHECKED BY : W. A. DAVIS DATE : 08-18-05

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS 26
2			4			